DETECTING AND CAUSING UNSAFE LATENT ACCESSES TO A RESOURCE IN MULTI-THREADED PROGRAMS

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ABSTRACT

Methods and systems for analyzing multi-threaded programs are provided. The predisposed execution of multi-threaded programs is modified to cause and detect latent

10   unsafe accesses to a resource, such as a memory location. It is first determined that unsynchronized accesses to a resource of interest are possible. When a thread requests to access the resource, the thread is suspended. A subsequent thread that accesses the resource awakens the suspended thread, thereby causing unsynchronized accesses to the resource that may produce unpredictable results. The unsynchronized accesses can be

15   logged for viewing by a user.